

## Celleron Therapeutics publishes new findings showing immune modulation underpins the anti-cancer effects of zabinostat

**Oxford, April 2nd, 2021** – Celleron Therapeutics, the UK-based company developing personalised medicines for cancer patients, has worked closely with Oxford University’s Medical Sciences Division to investigate the mechanism of action of zabinostat (previously known as CXD101).

The study found that zabinostat enhances immune-relevant gene expression. This effect leads to increased recognition of tumours by the immune system with enhanced anti-cancer activity. The study included a genome-wide expression analysis and functional profiling, which uncovered enriched gene signatures and pointed towards a role for the immune system in how zabinostat acts. When zabinostat was combined with immune checkpoint inhibitors, such as anti-PD1 and anti-CTLA4, using tumour models that are normally unresponsive to mono-therapy, it resulted in enhanced anti-tumour activity.

The recent scientific findings, published in the latest edition of *Molecular Oncology*, are highly consistent with the clinical strategy and clinical trial design which Celleron is pursuing in its CAROSELL Phase 2 clinical study, which investigates zabinostat and nivolumab combination treatment in patients with microsatellite-stable colorectal cancer (MSS CRC). MSS CRC, which remains clinically unmet, has been long established as being unresponsive to immune checkpoint inhibitor monotherapy treatment. In addition to the novel combination therapy deployed in CAROSELL, Celleron plans to translate the key findings on gene signatures described in the study to predictive biomarkers that help identify patients who undergo a favourable response to the combination therapy

**Professor Nick La Thangue, CEO, commented:** "This is a truly fascinating study. It represents a major milestone in understanding zabinostat but most importantly opens up new ways of identifying cancer patients that are likely to undergo a good response to the drug. We will deploy the new information to strengthen our precision medicine platform to maximise the therapeutic value of zabinostat for cancer patients".

**Professor David Kerr, CMO, commented:** This excellent science provides a platform which we can use to identify patients who are most likely to respond to zabinostat, significantly increasing the likelihood that our clinical trials will yield a positive result and benefit the community of cancer patients whom we serve. Equally as important, it opens up new avenues of clinical research in which we can deploy zabinostat in combination with a wide array of immune therapy approaches to improve their effectiveness".

For more details, please visit <https://doi.org/10.1002/1878-0261.12953>

## NOTES:

### About Celleron Therapeutics Limited

**Celleron Therapeutics** Therapeutics is a clinical stage biopharmaceutical company developing a portfolio of best-in-class therapies to treat cancer indications with unmet medical need. The company is a spin-out from Oxford University and is located at the Oxford Science Park, UK. Celleron has exclusive worldwide rights to zabinostat (CXD101) through a global licensing partnership with AstraZeneca. The company secured investment in 2016 from a consortium of South Korean investors. In 2020, Celleron incorporated SynOx Therapeutics, a portfolio company dedicated to the development of emactuzumab, and secured EUR 37M to support the company from a syndicate of blue-chip VC investors. Celleron is managed by a highly experienced team with proven track records, and its strong relationship with Oxford University provides access to an extensive global clinical and scientific network. For more information, please visit [www.cellerontherapeutics.com](http://www.cellerontherapeutics.com)

### About Zabinostat

**Celleron Therapeutics** Zabinostat is an epigenetic immune regulator that activates genes involved in tumour antigen presentation and acts by stimulating cancer cells to present tumour antigens to T-lymphocytes, thus overcoming immune evasion. The European Medicines Agency (EMA) has previously granted to zabinostat Orphan Drug Designation (ODD) as single agent therapy, based upon early-phase trial efficacy seen in relapsed or refractory peripheral T-cell lymphoma (PTCL) patients. A Phase Ib/II trial is being conducted in Mainland China and Hong Kong by Celleron's China partner, Nuance Biotech, to further validate the safety and efficacy of zabinostat monotherapy in PTCL. A Phase Ib/II clinical trial (study name: PLACARD) is also being conducted by Celleron's academic partner, University College London (UCL), to test the combined effect of zabinostat and pembrolizumab in treating diffuse large B-cell lymphoma (DLBCL) patients who have relapsed or are resistant to chemotherapy. A Phase Ib/II clinical trial (study name: CAROSELL) has been conducted in the UK to test the combined effect of zabinostat and nivolumab in advanced or metastatic microsatellite-stable colorectal cancer. Results showed that the combination treatment was well-tolerated and displayed promising anti-tumour activity with minimal side effects.